DOCUMENT RESUME

ED 111 163 95 EC 073 600

AUTHOR Senf, Gerald; Anderson, David
TITLE A Program Evaluation Manual for Project Initiators. Final Report.
INSTITUTION Arizona Univ., Tucson. Dept. of Special Education.
SPONS AGENCY Bureau of Education for the Handicapped (DHEW/OE), Washington, D.C.
BUREAU NO BR-H-12-2145B
PUB DATE Jun 74
GRANT OEG-0-714425
NOTE 54p.

EDRS PRICE MF-$0.76 HC-$3.32 Plus Postage
DESCRIPTORS *Administration; Demonstration Projects; *Educational Accountability; *Evaluation Methods; Exceptional Child Education; Guidelines; *Handicapped Children; *Program Evaluation

ABSTRACT

Intended for directors of special education projects, the manual provides guidelines for program evaluation. It is explained that the manual developed out of the experiences of the staff of the Leadership Training Institute in Learning Disabilities which provided technical assistance to 43 state projects. The manual's eight major sections focus on the following topics: alternative approaches to program evaluation and accountability; framework involving implementation, progress, and outcome aspects of evaluation; initial considerations in planning an evaluation; possible evaluation questions and priorities of various interested groups and agencies; selection of issues to be evaluated; 13 types of evaluation designs ranging from the simple to the more complex; suggestions for writing the evaluation plan including casting evaluation questions into behaviorally stated questions; and the transfer of responsibility to the on-site project director. Stressed for successful program evaluation are cooperation with all interested parties (such as educational administrators) and the use of evaluation results as feedback for modification of the program model. (DB)

****
* Documents acquired by ERIC include many informal unpublished *
* materials not available from other sources. ERIC makes every effort *
* to obtain the best copy available. nevertheless, items of marginal *
* reproducibility are often encountered and this affects the quality *
* of the microfiche and hardcopy reproductions ERIC makes available *
* via the ERIC Document Reproduction Service (EDRS). EDRS is not *
* responsible for the quality of the original document. Reproductions *
* supplied by EDRS are the best that can be made from the original. *
****

ED111163

U S DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

A

PROGRAM EVALUATION MANUAL

FOR

PROJECT INITIATORS

GERALD SENF &
DAVID ANDERSON

EC 073 600

2

ED111163

Final Report
Project No. H 12-7145B
Grant No. OEG-0-714425

Leadership Training Institute in Learning Disabilities

Department of Special Education
College of Education
University of Arizona
Tucson, Arizona

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

June, 1974

The activity which is the subject of this report was supported in whole or in part by the U.S. Office of Education, Department of Health, Education, and Welfare. However, the opinions expressed herein do not necessarily reflect the position or policy of the U.S. Office of Education, and no official endorsement by the U.S. Office of Education should be inferred.

Department of Health, Education, and Welfare
U.S. Office of Education
Bureau of Education for the Handicapped

Table of Contents

		Page
PREFACE		iii
I.	INTRODUCTION	1
	Conceptualizing Program Evaluation	
	Some Alternative Views of Evaluation	
	Program Evaluation versus Outcome Evaluation	
	Program Evaluation versus Staff Evaluation	
	Some Attitudes toward Evaluation	
	Invasion of privacy	
	Evaluation as worthless data gathering	
	Evaluation as Accountability	
II.	A WAY OF THINKING ABOUT EVALUATION	10
	Implementation Evaluation	
	Progress Evaluation	
	Outcome Evaluation	
III.	PLANNING AN EVALUATION: INITIAL CONSIDERATIONS	12
	Evaluation Content and Methodology: Initial Considerations	
	Conducting an Evaluation: Intial Considerations	
	Founding father	
	Competitors	
	Lines of authority	
	Specific Considerations	
	Site selections	
IV.	WHAT ISSUES MIGHT BE EVALUATED?	18
	Evaluation Concerns of Various Groups and Agencies	
	Implementation Evaluation	
	Funding agents	
	Organizational questions	
	Administrative questions	
	Other persons interested in the implementation evaluation	
	Progress Evaluation	
	Outcome Evaluation	
V.	SELECTING EVALUATION QUESTIONS	25
	Preliminary Considerations	
	Obtain an Evaluator's Advice	
	Some guidelines	
	Evaluator's role	
	Obtain Information from Relevant Sources	
	Involve Project Site Personnel	
	The local administrative head	
	Other administrators	
	Substantive personnel	
	Who controls the evaluation?	

Be Rational
Settling on an Evaluation Strategy
Apportioning Resources within Evaluation
Noting the Evaluation's Audience
Who is interested?
What would they want to know?
Responding to Immediate Pressures
Responding to Priorities
Considering the Costs

VI. EVALUATION DESIGNS 36
Simple Designs
Type A: No Evaluation Carried Out on the Activity
Type B: A Log of What Happened
Type C: Frequent Monitoring of the Activity
Type D: Subjective Impressions
Type E: Post-Activity Measures on a Treated Group
Type F: Pre- and Post-Activity Measures on a Treated Group
Type G: Pre-, During, and Post-Activity Measures on a Treated Group
More Complex Designs
Type H: Pre- and Post-Activity Measures on Treated and Control Groups
Type I: Pre -, During, and Post-Activity Measures on Treated and Control Groups
Type J: Pre- and Post-Activity Measures on Treated and Comparison Groups
Type K: Pre-, During, and Post-Activity Measures on Treated and Comparison Groups
Type L: Pre- and Post-Activity Measures on Treated, Control and Comparison Groups
Type M: Pre-, During, and Post-Activity Measures on Treated, Control and Comparison Groups

VII. DRAFTING A WRITTEN EVALUATION PLAN..... 41

Goals versus Objectives
Questions versus Objectives
Behavioral Terms
Drafting the Evaluation Section of a Funding Request

VIII. TRANSFERRING RESPONSIBILITY TO THE PROJECT DIRECTOR 44

Transmitting the Evaluation Plan
Selecting an On-Site Evaluation

IX. SUMMARY 46

Preface

During the academic years of 1971-74, the Bureau of Education for the Handicapped, U.S.O.E., supported a technical assistance team. This team provided consultation services to model centers for learning disabled children. During the first year it became apparent that there was a need for intensive technical assistance in a wide variety of program areas. Many of the programs needed considerable assistance in program evaluation. This manual is a result of the experiences of its authors who helped provide assistance in the program evaluation area to these child service demonstration programs.

The child service demonstration programs and the Leadership Training Institute technical assistance team were funded under the Learning Disability Act of 1969, which was incorporated into the Elementary and Secondary Education Act of 1970 as Title VI-G. The focus of these programs was service to children with learning disabilities, through the establishment of a model service center in each state. Designed, established, and operated through the offices of each State Department of Education, these model centers were conceived to be testing grounds for suitable programming for learning disabilities. This program could then be disseminated throughout the state. The role of the technical assistance team at the Leadership Training Institute was to assist each project in maximizing its potential in all areas of its functioning wherever possible (planning, implementation, administration, substantive services, evaluation and replication).

Technical assistance in evaluation is to be distinguished from evaluation of a program itself and from establishment of a complete evaluation plan for each program. The task we faced was providing advice in program evaluation to as many as 43 different programs -- each with different goals and objectives. Each of these programs had staffs with varying degrees of evaluation expertise.

Providing meaningful input to so many varied programs required that our evaluation model be flexible, while at the same time it also had to be sufficiently specific so that our assistance would have meaningful effects upon the behavior and competence of each program's evaluation.

This manual describes many of the issues that we sought to have the programs consider. In a sense, it is a "how-to-do-it" manual, though it is not as specific as a cookbook. We pose the problems that a person planning an evaluation would face and we attempt to delineate the issues and the relevant considerations in order to plan a coherent, comprehensive evaluation. This manual deals with the problems that are typically faced in the order that they usually occur. These problems are by no means simplistic and, hopefully, are not dealt with as such. Though brief, the manual attempts to treat each problem meaningfully in the context that these problems actually occur. This approach is in marked contrast to the text books in evaluation which organize topics according to theoretical models or the technology of the evaluation process.

The problem-solving orientation should make this manual useful to persons who have the task of planning special education service programs as well as those in charge of carrying out these programs once they are funded. The manual presupposes that persons who are in the role of initiating special education programs are typically not trained in program evaluation procedures. No technical knowledge of program evaluation is therefore assumed. This manual will not make the reader a competent program evaluator but it should allow him to make good judgements about how the program evaluation process should be planned and administered. With the assistance of someone knowledgeable about evaluation methodology, the program initiator should then be able to communicate effectively with this evaluator and in so doing help create a competent and informative program evaluation.

Introduction

This manual is divided into nine sections. In this first section, our program evaluation approach and alternative views concerned with the scope of evaluation, the role of staff evaluation, attitudes toward evaluation, and the issue of accountability are described. The second section details the evaluation framework that we have adopted. It involves implementation, progress, and outcome aspects of evaluation. The third section is concerned with initial considerations in planning an evaluation. It deals first with the role of the project's pre-history in constructing an appropriate and workable evaluation and then with the procedures that have to be engaged in and the problems that have to be dealt with in order to construct a meaningful evaluation.

Section four examines the range of possible evaluation questions and the priorities of various interested groups and agencies. The point is stressed that evaluation should be useful to as many persons as possible, including various interest groups, the project staff, the funding agent, and the initiator.

The selection of issues to be evaluated is considered in section five. The persons who should be involved at this stage and the role of dimensions such as the evaluation's purpose, audience, priorities and costs are discussed.

Somewhat more technical information on evaluation designs is considered in section six. Our purpose here is to inform the project initiators about the range of question-answering "designs" that exist so that he can converse comfortably and intelligently with evaluators.

Suggestions for writing an evaluation plan, as is needed in preparing grant requests, are provided in section seven. Goals are distinguished from objectives; casting evaluation questions into behaviorally stated objectives is briefly discussed. The aim of these technical sections is to provide the program initiator with an information base from which to converse with evaluators rather than to teach the initiator how to become an evaluator himself.

The final sections are concerned with transferring responsibility for the evaluation to the on-site project director. Considerations in selecting an on-site evaluator are discussed briefly. A summary section concludes the manual.

Conceptualizing Program Evaluation

Program evaluation is viewed as an ongoing, dynamic activity throughout the life of the program - from pre- planning to post-project assessment and decision making by interested observers. Evaluation is an information gathering procedure, utilized specifically for decision making. Sometimes this decision-making process is used for modifying aspects of the ongoing program; at other times the procedure is used to make decisions about program continuation. In all cases, information gathering must serve a specific stated

purpose. That is, one must always ask "What question will the data answer, or what need or demand will the data fulfill?" Only information which represents the most efficient, reasonable method of answering each question or fulfilling each need should then be collected.

Viewing the evaluation process as an information gathering system for decision-making changes the focus from that of judging program worth at the conclusion of a program to that of monitoring and adjusting those aspects of the program about which one is most intimately concerned. Rather than being simply a component of the program, the evaluation process permeates the total program because people must continually make judgements about the correctness, appropriateness, or value of their activities and those of others. Evaluation methodology and its related tools simply represent the technology for both proposing and answering questions about these activities in a scientific, objective manner.

As a body of techniques, evaluation methodology is one accepted method of gathering information which will provide a rational and logical means of supporting statements about the project. Of course, evaluation methodology can be used ritually, data being collected without specific purpose or to satisfy some erroneously perceived demand. Like any other set of tools, evaluation methodology is limited by the creativity and the ingenuity of the user. Being based on the rather rigid strictures of the scientific method, evaluation methodology is already very limited in that it must trade much of the richness of project events for objective measurement. Consequently, the methodology must be used sensitively and conscientiously if the information gathered and the conclusions drawn are to be useful. Evaluations undertaken ritually and without enthusiasm might just as well not be done; the problem in these cases lies as much or more with the persons accomplishing the evaluation as with evaluation methodology per se.

The process of casting questions of concern about the project into measurable objectives is considered later. At this point, however, it must be acknowledged that the science of evaluation is only one way for people to learn about the efficacy of their own actions, about their effect on others, and about the organizations in which they work. The keen eye and open mind of a conscientious project director will certainly see many things that the empirically-based methods of the evaluator might miss; scientific methodology should not be seen as competing with the good judgment of the program staff or of those who must decide about program modification and continuation. Both scientific evaluations and the testimony of those who have been involved in the program itself or similar programs can be blended to yield a comprehensive understanding of the program's functioning. Evaluation methodology, used sensitively, has the advantage over testimony of demonstrating the reality of certain assertions in an objective manner so that a "neutral" observer is able to draw his own conclusions. We adopt the position that evaluation methodology should be as sensitive as possible to the nuances in information contained in programs, while at the same time objectifying these data so that a body of reliable information can be amassed for use by others.

There obviously does not exist a single correct method for program evaluation. What specific aspects of the program are to be evaluated will

be unique judgments of the people involved. The evaluation methods chosen will also be unique depending upon resources and the conclusions to be drawn from the information gathered. As such, evaluation is a personal enterprise, having no set formula. The available tools may be standard, but the specific methods chosen and the manner in which the tools are used will necessarily be highly individualistic.

The task of the program initiator is to assure that he has sufficient technical capabilities at his disposal to answer questions in a logical and rational manner. Program evaluation can be extremely useful in fulfilling this responsibility. However, it must be recognized that program evaluation is a specialty area in which persons receive advanced training at the Doctorate Level. Viewed within this context, there is no reason to assume that special education program initiators or directors will possess a high degree of competence in this area nor is there any particular reason why they should have such competence. Too often, the demands for accountability have been placed upon persons who lack the necessary interest or proper training. These demands also distract them from their particular area of competence. Persons cast in the new role of project evaluator as a portion of their directorship job frequently feel uncomfortable, if not totally inadequate, when confronted with this difficult task. If accountability is to be taken seriously, both by funding agents and by the recipients of those funds, each must recognize that special training is necessary for meaningful evaluations. Consequently, we strongly advise that project initiators seek the assistance of a trained evaluator when they plan a project.

Some Alternative Views of Evaluation

There are at least four other ways to view evaluation. These other ways are either inconsistent with our viewpoint or represent a subset of the evaluation issues that will be discussed.

Program Evaluation versus Outcome Evaluation

The first takes the position that evaluation is synonymous with the assessment of the absolute worth or folly of a particular project. Sometimes referred to as the "summative" or "outcome" evaluation, this view limits the domain of the evaluation enterprise and makes it a totally judgemental process which frequently engenders threat and uncertainty in the minds of project staff. Historically, evaluators have tended to foster this conception, stressing the experimental design approach to evaluation which it was hoped would lead to the total and conclusive acceptance or rejection of the endeavor.

A program's worth cannot be judged by any set of data and accompanying statistics; people must still make judgments of these data. Such judgments encompass the expectations of persons and their knowledge of the realities concerning the difficulty in administering programs, the stubborness of the problems they are frequently trying to solve, and their knowledge of available alternative solutions. Acceptance or rejection of a program cannot rest on

the outcome of a single summative evaluation study any more than a scientific theory can be proven or disproven on the basis of a single experiment. The total devotion of evaluation resources to the outcome issues represents a misplaced emphasis in our opinion. Instead, careful, self-conscious monitoring of the procedures (implementation) and of the progress of the substantive activities of the program (progress) must receive their share of the resources. In fact, it is our opinion that most service-oriented programs would better spend their limited evaluation funds on careful monitoring of the implementation and formative phases of their programs rather than in the demonstration of the total appropriateness of the model under consideration. We see this latter matter as one for scientific study, the requirements of which can often not adequately be met within the service context or through the talents of the practitioners who are typically employed as program directors. Such endeavors should instead be undertaken by researchers who should work in consort with practitioners to study the efficacy of various practices.

Program Evaluation versus Staff Evaluation

The second difference between our approach to evaluation and other approaches concerns the distinction between evaluating programs and evaluating staff. Staff evaluation is undertaken to determine the quality of employee work and the employee's ability to function with others for the purpose of determining employment continuance, merit raises, and promotions. Staff evaluations are evaluations of specific individuals. Program evaluation, on the other hand, is an evaluation of a model, an approach to a problem, for which a staff is assembled and assigned roles according to a designated plan. The purpose of the program evaluation is not to determine the value of the staff members so much as it is to determine the value of the program plan itself.

A single example should clarify this distinction. Imagine that a teacher is hired to provide consulting services to regular classroom teachers in order that the regular classroom teacher be better able to teach reading to some of the retarded readers in her class. The consulting teacher, if her performance is to be evaluated at all, should be responsible for performing the activities contained in her job description to the best of her ability. If the children do not benefit from the role behaviors that she had been asked to assume, one logically should not hold her responsible but instead fault the model in which that role is prescribed.

Though the conceptual distinction between staff and program evaluation is really quite clear, in practice the distinction frequently blurs. Administrators often would like to learn about the competencies of the particular staff working on special projects (staff evaluation) in addition to the efficacy of the project's plan. Also, project personnel (laudably) often feel responsible for the outcome of the program, even if they are not intellectually committed to the specific role they are asked to assume. The consequence of blurring the distinction between staff and program evaluation is that persons tend to fear data collection because they fear being evaluated. In the context of a large program, there are many events over which an individual staff member has little control. If these events appear to reflect unfavorably upon him, he will obviously be reluctant to welcome evaluators' scrutiny.

Project evaluation frequently, then, places staff in a conflict situation; on the one hand they share in the desire to learn about the project's successes and failures in order that the project can be improved, but, on the other hand, they do not want their false starts and failures recorded, written up, and distributed. Nor, of course, do they want to chance their real-life consequences, such as continued employment, to depend on project success.

How can this conflict be resolved? Certainly project personnel, like any other regular line appointments, must be accountable for their work behavior. We suggest that the distinction between staff evaluation and program evaluation be made extremely clear to all special project personnel by the administrator responsible for staff evaluation. In our experience, it is not enough simply to claim that staff evaluation is not occurring in the context of project evaluation. The fact appears to be that humans are extremely judgmental beings. Thus to claim that only the project model is being evaluated has a hollow ring to it. Therefore, the supervisory personnel should specify the domain and criteria of the staff evaluation so that it can be discriminated from the program evaluation. If an administrator is truly interested in evaluating a model, it is absolutely necessary that this distinction be made in order that the specific collection of people that comprise the staff will work together with the project director in collecting the information that he needs to evaluate the model. If the staff remains concerned that the very information that they are collecting to evaluate the model will also be used to evaluate their individual performance, the obvious result will be a reluctance to cooperate with the data collection and, perhaps in some cases, an outright attempt to sabotage the effort or distort the information.

In summary, if one wishes to learn something about a program's functioning and the problems and successes that it experiences, one must remove the project staff from the conflict position of incriminating themselves by the evaluation evidence they must help gather. By making clear the local rules which will apply to staff evaluation, as opposed to that information which will be used solely to evaluate the efficacy of the program in which the people are working, the administrator can develop rapport with the project staff and this will assure a greater probability that the information that he learns about the program will be reliable and provide a sound basis for further program planning.

Some Attitudes toward Evaluation

Two prevalent attitudes exist regarding program evaluation that will need to be dealt with by program administrators: one is that evaluation represents an invasion of privacy, the second is that evaluation is a worthless enterprise that drains dollars away from service to children.

Invasion of privacy. The feeling that privacy is invaded by evaluation procedures is, of course, related to the staff versus program evaluation distinction just considered. It must be recognized that some persons will not trust the distinction between staff and program evaluation no matter how clearly the distinction is made. Sometimes this attitude is reflected

in extreme positions such as asserting that persons should not be evaluated, or that contract clauses or tenure prohibit the evaluation that is desired by the project, whether or not evaluation focuses on the program instead of the staff itself. At other times, one finds a certain staff member who simply deals in a "paranoid" fashion with any judgment. Though we are not using the word paranoid in the strictest psychiatric sense, its flavor does portray the strength of some persons' convictions against evaluation. For whatever reason, distrust of evaluation is not uncommon even in its extreme forms. It is likely, therefore, that any sizable project will have staff members who shun evaluation. If these staff members are in positions which require cooperation or, more so, their active assistance in order to complete the program evaluation, it is obvious that the evaluation will encounter serious difficulties.

We know of no ways beyond those suggested above to deal with these distrustful attitudes. (There may even be some truth to a person's fears about evaluation, for they may have previously been victimized by the evaluation process. Then too, those who fear evaluation may, in fact, have something to fear because of their own personal limitations.) The point is that persons with such attitudes should not be placed in special project positions where they are capable of inhibiting or restricting the gathering of information that is necessary to make important judgments about the program's functioning. An important consequence is that the selection of a site for a project and the staffing of the project must take into account the necessary evaluation demands ahead of time in order to avoid persons who will jeopardize the data base upon which judgments about the program must rest. It is much simpler to avoid dealing with persons who fear evaluation when evaluation is a necessary part of a program than it is to deal with their fears once the program is under way.

Evaluation as worthless data gathering. Another attitude about evaluation that inhibits the effective utilization of evaluation technology portrays evaluation as being essentially a worthless enterprise. We like to believe that such attitudes are generally unfounded. When such attitudes are based on experience with unsuccessful evaluations, the fault likely lies with the inadequacy of the evaluator and not with evaluation methodology per se (although evaluation methodology must be recognized to be an infant science). We enthusiastically agree that huge amounts of time and money have been literally wasted in collecting data that proves to be worthless. Many data are worthless not because they fail to provide clear-cut conclusions but because they were never capable of testing the issue in the first place. The kinds of information that should be gathered to assess certain issues and the structure this information must possess are described later in this manual. Knowledge of these more technical aspects and the sensitivity with which they are employed often makes the difference between a worthless evaluation and one which genuinely aids decision making.

The summary dismissal of evaluation as worthless can mean one of two things: the person simply has not been exposed to an exemplary evaluation procedure or s/he is basically afraid of evaluation as discussed above and is choosing to derogate the evaluation process rather than to express personal concerns about whether he will be judged unfairly or whether his own inadequacies will be uncovered. We find that administrators can readily distinguish the

person who is basically concerned and threatened by the evaluation requirements from one who has genuine reservations about evaluation's worth. In the former case, we recommend not involving the person in a position critical to programs which require program evaluations as noted above. In the latter case, such a person can be a valuable asset to a program in that such a person will likely not sit silently by while "data gathering for data gathering's sake" goes on. Instead, if the evaluation is truly not serving its purpose, such persons are often very vocal and will help make the evaluation a genuine service to the decision-making process and, hence, ultimately to the children the program serves.

To summarize, we believe that evaluation information can be gathered which can be useful for decision making but agree that many times program evaluation, inadequately handled, leads to tremendous wastes of time and resources. Persons with a genuine, rational scepticism about evaluations' worth can be a genuine asset. They are the type of people who insist that the data being gathered answer some question or fulfill some need or demand. They are also the kind of people who will further insist that the information being gathered be the simplest, most cost-effective, and efficient way of answering the evaluation question. These are the kind of content specialists that a competent evaluator likes to work with, because the more useful he can make the evaluation, the greater the support he can garner from the staff in gathering the information for making subsequent decisions.

Evaluation as Accountability

Do you want to act accountably or do you want to be accountable? This is a question of integrity: there is no policy or rule that a clever administrator cannot circumvent or bend to meet the needs of his own department. While such aplomb can be a virtue, in dealing with the accountability issue, it can lead to an avoidance of the quality controls legitimately desired by funding agencies.

In our experience, we find that professionals react negatively to assessments of their accountability. Professionals are not effectively made accountable by external policy requirements or threats. If evaluation methodology is utilized to coerce professionals to act in new ways which are termed "accountable," the implicit assumption is that they have acted in some unaccountable way in the past. The clear implication is that unaccountable people are irresponsible people. It is no wonder that professionals have not warmly embraced the accountability dictum that has recently surfaced.

The adverse reaction to the notion of accountability, epitomized by required program evaluations, must be effectively dealt with by program administrators. The danger is that some professionals will react against the implicit charge that they have previously acted in an inaccountable, irresponsible way by finding ways around the requirements of evaluation rather than to approach evaluation with an open desire to learn. We personally believe that the characteristics of most of the roles involved in public education require a great deal of personal responsibility and integrity. No external agent will ever be capable of affecting a greater commitment and output through the threat of evaluation than can be achieved by having the responsibility for quality work reside in the individual.

You may or may not agree with this view. If you agree that accountability cannot be achieved through the threat of evaluation, it is necessary to convey this belief to your staff. Professionals want to hear that evaluation will aid their own judgment processes to determine the best course for their future professional endeavors. They do not want evaluation used as a monitor of their personal worth as professionals or as a watchdog to determine whether they are being "responsible" on the job. The notion of accountability encompasses these negative aspects.

We think the approach to evaluation advocated in this manual preserves the integrity of the professional by attributing to him the motive to seek self-corrective, objective feedback. We have found the following statements generally characteristic of educational professionals:

1) Being asked to be accountable is a legitimate request of any professional; however, if it is implied that one would not be accountable were evaluation procedures not to be in effect, he will become angry and unsupportive of the evaluation effort.

2) Accountability is acceptably thought of as the professional reporting to the taxpayer regarding the success or failure of certain of his efforts. Consumers have a right to know what they are buying. Educators, like any other professionals, have no right to cloak their services in such secrecy that the buying public cannot evaluate whether greater or less support of the endeavor is warranted.

3) If an evaluation as designed will not provide immediately, or ultimately, an improvement in professional practice, then the evaluation activity should be discontinued. If an evaluation activity is required by a funding agent, then one logically should consider whether continued support from that agent is worth the costs of engaging in unproductive evaluation activity. Assuming that the dependence of the funding agent is great, as is usually the case, one will likely have to make some compromise between what one feels is necessary for the good of the project and what is being required by the funding agent.

4) Attitudes against perfunctory evaluations should be voiced because of the money they waste. An administrator should seek talented evaluation persons who can both satisfy the dictates of grants and contracts while also providing the project with genuinely useful information. These goals are not incompatible.

In summary, viewing the role of the evaluator as providing accountability - a quality control mechanism - is demeaning to the professional staff. We encourage a benign view of accountability as simply the taxpayer's right to know the efficacy of the products that he is purchasing. Evaluation, in this context, is a professional activity in and of itself carried out in consort with other professionals, for the purpose of improving their own impact and for demonstrating their efforts to the "consumer". This view rejects the notion that funding agents have the right to use "accountability" to threaten, control, and demean professionals. We believe that it

is professionally responsible to resist these attempts to create an adversary rather than a cooperative relationship between evaluation personnel and staff personnel. In the end, one must make the simple decision whether evaluation is a function performed for a funding bureaucracy or whether it is a self-corrective process ultimately in the service of professional growth and client welfare. Any view of evaluation which becomes subservient to policy rather than to information seeking and change for the better must be challenged.

A Way of Thinking About Evaluation

We propose three kinds or aspects of evaluation termed "implementation," "progress" and "outcome evaluation." Implementation addresses the host of questions concerned with whether the program is organized, administrated, and operated in a manner either prescribed by or desired by the initiators. Progress evaluation concerns the program's movement toward its objectives and the modifications which might improve its rate of progress. Outcome evaluation addresses the broad question, "To what degree did the project meet its objectives?"

Implementation Evaluation

Implementation assessment is typically not included in evaluations, predominantly for historical reasons. Evaluation has usually been viewed in terms of experimental designs which were oriented towards outcome questions - that is, whether the program did or did not meet its objectives. Administrative and organizational issues were typically left to the experience and, often, intuition of those charged with implementing programs. With the increase in the number of new programs stimulated by federal and state monies, many educators, psychologists, and other social science professionals were required to take on administrative responsibilities for which they lacked training and for which they might not possess the requisite competencies. Consequently, we believe it useful to view the administrative and organizational issues in an open, rational manner and to ask whether the structure established to meet the project objectives and the administrative procedures utilized in that organizational structure can reasonably be seen as a sound basis for reaching the stated objectives.

The efficacy of a program's plan, its "model", can never be fairly tested unless the program is implemented successfully. For example, one can obviously not assess the effectiveness of newly developed training materials for perceptually impaired children if the materials reach the classroom late in the school year. One cannot fairly evaluate the efficacy of the itinerant teacher support program if the itinerant teacher is excessively absent or if the teachers to whom she is to provide services are antagonistic. Rather than relegate the host of intricate problems involved with administration and organization to such popular rubricks as "red tape," "bureaucracy" and "personality clashes," careful assessment of our capabilities in these areas, pinpointing wherever possible the problems and rationally seek their solution should be made. In an extensive nationwide study of numerous model learning disability centers, directed by the first author and Dr. Steven Reiss of the University of Illinois, Chicago, educational administrators proved to be extremely interested in talking about problems and seeking workable solutions. Furthermore, they evidenced an extreme degree of savvy in solving problems and avoiding those same types of problems in the future. Inexperienced administrators encounter many of the same problems and often create others which could have either been solved or avoided through use of an appropriate, self-conscious monitoring system.

Progress Evaluation

What we are calling progress evaluation has been labeled by others "formative," "process," "procedural" and other terms. We have selected the term "progress evaluation" in order to stress the ongoing nature of this type of evaluation and the feedback that it embodies. Progress evaluation assures that the staff remains sensitive to the objectives for which they were hired by providing informational feedback on the intermediate steps taken in order to reach the final objectives. For example, if one is organizing an in-service program to increase the knowledge of regular classroom teachers about certain characteristics of children requiring special education, one should obtain feedback from the teachers along the way to determine whether changes in the inservice program format are needed. Rather than wait until twelve monthly sessions have been held to find out that the program is not serving the teachers' interests or needs, a simple questionnaire or discussions following the session could serve to refocus the program and make it more likely to meet its stated objectives. In essence, progress evaluation constitutes feedback as to whether one's objectives are being attained.

Outcome Evaluation

Outcome evaluation has historically been considered synonymous with the concept of evaluation, that is, "summative evaluation," or "product evaluation." Like progress evaluation, outcome evaluation is substantive in nature, concerned with whether the project has actually accomplished its objectives or, more realistically, the degree to which objectives have been accomplished. Outcome evaluation has been the major focus of attention for some time. However, failure to attend to the implementation or progress phases may jeopardize one's chance of obtaining suitable outcomes and in learning why suitable outcomes were not obtained. Thus, while outcome is important, whenever disappointing results are obtained at this stage, little is often learned as to why success was so limited.

A redistribution of evaluation resources into the implementation and progress evaluation aspects will allow a much clearer understanding of a project's strengths and weaknesses so that future projects can benefit from past experience. Reports showing no significant differences between treated and untreated children, for example, tell us nothing about why greater gains were not made by the children in whom greater time and effort was invested. Early, self-conscious attention to the ongoing process would have shown that progress was not being made, and that procedural corrections were necessary.

The distribution of resources within evaluation to address implementation, progress and outcome is a highly individual and critical set of decisions. A later section describes the kinds of questions typically asked by different persons for each of these three aspects of evaluation and goes into depth about various considerations one might utilize in deciding how to apportion one's evaluation resources. At this point, understanding the distinctions between implementation evaluation, progress evaluation, and outcome evaluation will allow us to consider the actual steps in planning an evaluation.

Planning an Evaluation: Initial Considerations

Evaluation planning should begin very early. As soon as the program has been conceptualized, evaluation consultation will be useful. Because the purpose of evaluation is to provide feedback information for corrective modifications of a program, it is important for project initiators to provide the project with monitoring capabilities. If evaluation is thought of only as a "component" of the project or as "accountability," it can easily be put off until later stages. In our opinion this is a mistake because the evaluation for corrective feedback needs to be part of the fabric of the program, not something appended later.

We stress the early consideration of evaluation planning because of yet another consideration reflecting the reality of program genesis within large educational systems: It is seldom the case that the project initiator is the person who carries out the day to day functioning of the project. Many times, in fact,neither the project initiator nor any of his immediate planning staff become involved in the project's day-to-day functioning. Project initiators have many ways of insuring quality programs, such as placing them with a trustworthy person and/or in a school district that has operated similar programs in the past, or by assigning one of his best project monitors to the program, and so forth. We believe that building an appropriate evaluation into the program in the beginning and having it part of the total design is one of the best ways to insure a quality program.

In addition to our position that evaluation should be part of the fabric of the proposal and that it is a mechanism by which project initiators can help increase the probability that the program will meet its objectives, there are a number of other considerations which warrant early evaluation planning. Some of these considerations are relevant to the content of the evaluation and to its methodology while others are relevant to carrying out an evaluation.

Evaluation Content and Methodology: Initial Considerations

Consider first the question of how the content of the evaluation and the methodology are to be determined. In the initial phase of evaluation planning, it is important to ask what information the program will need to produce in order to survive. Unless one accepts that the new program will have a short life span, one should ask very pointedly what will have to be shown to whom for program continuation. Obviously the answer to this question is not always simple and varies with the funding pattern underlying the program. Will a school board, for instance, be the one to decide whether the program is continued? Will it be a federal granting agency who must rule on renewals? Does one's department have money which could be used to support a worthy program should external funding be removed? Is the program a demonstration/replication oriented and, hence, planned to have a limited life span? If the latter is the case, then one needs to consider who the recipients of the successful portion of the program will be and how they will fund the new ideas in their districts. The point is that very early on, one has to consider where these future dollars will come from and,

consequently, what information it will be necessary to show future "buyers" in order to have them adopt the project.

Because program continuation or adoption of program elements by other projects or districts is contingent upon one's ability to demonstrate project success in one way or another, it becomes necessary to plan an evaluation in accord with the information demands of future consumers. Given our position that evaluation must be woven into the project's fiber in order to be genuinely a service to the program, capable of improving it, and able to demonstrate its capabilities, planning for continuance must be a part of the decision making process in the formative stages of the project planning. More simply, programs have typically two or three years to prove their worth. A project must be extremely efficient, hard working, and adept at problem solving if it is ever to demonstrate its viability in such a short period of time. A proper implementation and progress evaluation can help the program isolate problems before they become disabling so that solutions can keep the project both on its time line and out of serious complications. A properly planned outcome evaluation can serve to substantiate the case that the program does, in fact, have the characteristics that the project initiator had hoped for.

The question comes down then to whom must one demonstrate the project's viability. It is at this point where the realization is most vivid that program evaluation has a very large audience. To use a marketing metaphor, projects have many potential consumers who require certain evidence that the program is worth purchasing. When the project initiator recognizes just how many persons there are who are interested in the outcome of the project he is designing, the problem question, "What is there here to evaluate?" changes to "Of the host of issues to evaluate, which ones shall I select for evaluation?"

Let us look then at who is interested in the outcomes of special education projects. Those interested in whether the project is conducted as contracted and in the outcomes of the project include the funding agency (and ultimately the agency's own source of funding, frequently another branch of government), state education agencies, the project initiator himself and his staff, the project staff and project director in particular, often local education agency officials where the project is conducted, persons immediately concerned with the project including teachers and parents, persons or organizations interested in the project such as parent groups, professional groups, and other school districts who themselves might be seeking an efficient means of solving similar educational problems in their schools.

It is not simply the number of persons and agencies interested in the project that generates so many possible issues to evaluate. Rather, it is the diversity of interests exhibited; each group or agency views the project from a slightly different perspective and consequently seeks different information about the project. As project initiator, one can certainly not afford to collect the data necessary to answer all of the questions that these many interest groups would ask. We shall consider the actual process of selecting evaluation questions in a later section of this manual. At

this point it is important to recognize that various interest groups want to know various things about the project and will accept different kinds of evaluation information.

A funding agency typically is interested in (1) whether a project is administered according to the contract, particularly the budgetary aspects, (2) whether the program proves to possess the qualities anticipated by the initiators, and (3) what new information the project provides. Project personnel, another group intimately interested in the evaluation, treat the task more personally in that they often believe their subjective impressions provide a wealth of detail and insight missed by the evaluator. Other times project staff also seek information that their own experience cannot afford them. For example, a resource room teacher on a project may want to assess objectively the impact of her prescriptive teaching in various subjects. A project initiator might think of only evaluating the over-all effects of prescriptive teaching without bothering to examine the relative success with each type of problem area being treated. A parent involved in the project as a teacher's aide may be interested in still other dimensions.

Not only do other persons or agencies pose different questions but they will also accept different kinds of evaluation data. A parent volunteer might be satisfied with the project and suggest refunding based solely on the perception that some of the target children seemed more enthusiastic and happy in school. The school board, considering further expenditures for similar projects throughout the district, may want cost-effectiveness estimates or evidence that the project not only increases the target children's emotional well-being but also their academic skills.

Thus, there are two questions that the project initiator should ask himself: (1) who is interested in the project and consequently in its evaluation?; and (2) what do those persons want to know about the project? These concerns can be phrased as more detailed questions that a project initiator should pose to himself in the very early stages of the project's inception: First, "Who will want information about the project and who will I want to tell about the project's activities?" Second, "What will I want to tell each person and what evidence will I need to prove my points?"

Conducting an Evaluation: Initial Considerations

Not only will the question chosen for evaluation and the evaluation methodology be dependent upon early planning, but so will the problems that one will encounter in carrying out an evaluation. Even in its earliest formative phases, a program has a previous history. The persons working on the idea have previous relationships with one another; the orientation of the project has likely evolved over a lengthy period and certainly has not sprung full-blown at the present time; there may even be a previous project upon which this new program is consciously being modeled; the project may be reflective of a more general philosophy prevailing within the state or other administrative unit. The implications for evaluation of a project's prehistory are widespread.

Founding father. First, consider the role of program genesis. Whose idea was the program? Or equally important, who thinks the program was his idea? What is this person or persons present role during the program's inception? If he is still involved, will she/he be able to relinquish control as well as responsibility to the persons who must carry out the program? If not still actively involved, will the "founding fathers" attempt to influence the project's direction? If not formally recognized or informally appreciated, will these persons remain supportive of the program or will they feel it was "stolen" from them? In essence, the question is, "Whose 'baby' is this, and what implications does 'ownership' have for carrying out the evaluation?" Specifically, will the persons who believe themselves responsible for the idea be willing to cooperate with the evaluation plans that are being formulated now, or will they remove their support or even actively sabbotage the program's efforts?

Competitors. Related to the "founding father" role is the fact that new programs do not serve totally new needs. New programs typically represent new solutions to pre-existing needs thought to be inadequately met by previous programs or strategies. As such, persons involved with creating new programs often have a substantial commitment to the notion that the new program will be superior to existing services. By implication, then, persons providing existing services could view themselves as being displaced and/or feel as though others believe they have failed. For example, consider the reaction of reading specialists who must work side by side with a new learning disability staff involved in the remediation of reading difficulties. There exists considerable professional rivalry. Or consider the more general problem faced by a program for handicapped youngsters which requires a "specialist" to accomplish work that the regular classroom teacher cannot accomplish. Without adequate communication, the regular classroom teacher and the specialist may feel themselves in competition, with the regular classroom teacher then feeling inadequate or resentful because of her apparent inability to educate one of her pupils.

One should consequently ask who would be threatened by this new program, who is implicity being replaced or, by implication, being found inadequate at providing for the needs that the new program addresses. Having identified those persons or groups, one must then consider the likelihood that they might create problems for this new program. How then might the new program be structured or placed so as to minimize these potentially disruptive influences? Alternatively, one could consider how some of these "displaced" persons or groups might become involved in this new program so that their potentially negative impact can be minimized or even eliminated.

Lines of authority. A third area of potential problems in carrying out an evaluation, which needs to be considered in the early planning phases, is the formal and informal line of authority connecting all those persons who will have a role in administering or influencing the project. This area is obviously very complex and its handling will depend enormously on the interpersonal savvy of the project initiator.

The formal lines of authority are an issue of public record but we all recognize that various informal systems of influence exist based upon

past professional relationships, personal relationships, inter-personal power, political influence, and so forth. It is important to consider specifically with regard to evaluation whether the evaluation plan that is being generated will be workable within the given administrative structure. Will those persons having either informal or formal control over evaluative decision-making be supportive of the evaluation procedures being drafted?

Specific Considerations

The line of authority present in the project and the initiator's consequent judgment of whether the evaluation procedures being considered would be acceptable within the total educational system spawn a host of specific considerations relating to the project site selection. Many programs have extreme interpersonal problems because the evaluation methodology originally adopted by the program initiators was simply not acceptable to the program staff nor to the on-site administration. Consequently, the program staff was unwilling to collect the necessary data.

Site selection. Site selection is based on multiple considerations, only one of which is the ability to carry out the desired evaluation. Other considerations are very important: the site's geographic location, its representativeness for the program, its expressed desire to support the program, the capability of the staff, the site's need for services, or the felt responsibility to provide the site with special services, the confidence one has in the local administrators to carry out the program both faithfully and competently, and so forth.

Amidst these other considerations, the evaluation requirements thrust upon a special project site are often overlooked. Overlooking the evaluation demands is a crucial mistake because the evaluation is important not only to continue the program and find other adopters but to increase the chances of program success. Hence, one must ask the following questions of potential program sites:

1) Is the site receptive to the idea of a special program placed there?

2) Is it cognizant of the administrative problems that inevitably accompany such programs?

3) Are site personnel philosophically in agreement with the basic goals of the program?

4) Is the site in need of the program's services or will the program be "in the way" or "just another special program"?

5) Are there persons at this site sufficiently experienced in carrying out special programs or will additional persons need to be hired?

6) Will the site recognize the importance of the evaluation effort and will it be supportive?

7) Will the site invest itself in the program's continuation and, hence, be motivated to provide the necessary evidence in its argument for continued funding?

8) Will the site be receptive to visitors seeking information about the project and generally accept their information-dissemination responsibility?

9) Will it accept the degree of administrative control that the project initiator and his level of administration wish to retain? Problems can arise: one results from placing a project over which one wishes to have no further control in a site where the host is willing to receive the project but does not wish to have administrative responsibilities, the other results from placing a project in a site where the local administration wishes to have almost total control but the initiator does not wish to relinquish total authority.

10) Is the site representative of the domain of potential sites that one would wish to have adopt the program? Obviously, if the site is unrepresentative, potential adopters will be wary of the program's demonstrated worth.

11) Is the administrative staff at the site deemed capable of forming the desired relationship with the initiating agency?

There are additional issues about site selection which will be considered later, in conjunction with the issue of what specific evaluation questions one selects and whether the specific site in question will be receptive to collecting data on these questions and more generally whether people at the site will be supportive of the evaluation effort.

In summary, project initiators must be very sensitive to the pre-history of the project they are creating. They must recognize that persons besides themselves have vested interests in the project and may even consider it as "belonging" to them. Additionally, other persons may be made to feel like they have failed or that resources that potentially could have been devoted to their programs were diverted to others. In all of these cases, it is extremely important for the project initiator to assess the roles these persons might play in the new project, specifically whether they will be supportive or antagonistic toward it. He should do whatever possible to gain support for the project either by involving important others or by placing the project in a site where potentially negative influences can be minimized. The danger is to ignore these real issues deriving from the project's pre-history and in so doing jeopardize the very viability of the project. Unless the project can be adequately implemented, the project model under consideration can never receive adequate testing. The project initiator wants to be certain that the project has a fair chance of proving its worth so that rational decisions can be made about the future continuation of the program or about its adoption in other districts. Selecting a fertile site for the project and carefully establishing clear lines of authority between the project initiator, project staff and other site staff, are two very important steps. In the latter case not only the distribution of responsibility but also delineation of authority and "chain of command" are essential for the adequate operation of the program.

What Issues Might Be Evaluated?

Before settling on specific issues which will comprise the project's evaluation, it is well to consider the range of possible issues that could be evaluated and to dimensionalize the domain so that potentially important or useful issues are not overlooked. In a subsequent section of this manual we will discuss those considerations you might use to choose the specific questions that you will address in the project's evaluation.

Parenthetically, you will recognize that we have been using the terms "evaluation questions" and "evaluation issues" interchangeably and have not yet specified exactly what is meant by them. Many of you will also be familiar with evaluations which are organized in terms of major goals within which specific objectives are posited; the objectives and the associated activities then form the basis of the evaluation. Specifically, the objectives are evaluated in terms of the degree to which each is realized. A later section deals with how evaluation issues and questions regarding the program can be recast in behavioral terms and structured in funding requests as goals and objectives. At this stage, it is simpler to discuss what questions one would wish to ask of a program rather than to rework the questions into behaviorally stated objectives.

Let us consider the various groups or agencies who will be interested in educational program evaluation in order to gain a feel for the typical concerns each of these groups and agencies possess. We shall take up in turn the three aspects of evaluation described earlier: implementation, progress, and outcome.

Evaluation Concerns of Various Groups and Agencies

Implementation Evaluation

Recall that the implementation evaluation concerns the monitoring of the administrative and organizational aspects of the program. Its purpose is to assure that an appropriate structure is established within the program between the program and the larger systems within which it is operating, and that administrative procedures are adopted to carry out the substantive activities in the amount and degree specified in the project proposal. Surprisingly few persons are cognizant of the problems that poor organization and inconsistent administrative policies can heap upon a program. At the same time, very few persons appear surprised when such problems occur. We recommend that care be devoted to specifying exactly how the program will be organized and administered.

By organization we mean primarily a chain of command and role responsibilities which specify the duties of each person and the role relationships between persons at various stations within the project and their relationships to people outside the project. For example, a full-service special education intervention program might have a testing director through whom all requests for diagnostic testing would be directed and who would have

authority to make decisions regarding the priority of testing. However, he might lack the authority to admit a child into the program's remedial section without a staff meeting involving other members of the program.

While the topic of role responsibilities and relationships is so basic to program implementation, it is nevertheless the fact in our experience that such issues are left to "common sense" or to the "basic understanding" of the persons involved. The organizational structure is never physically recorded nor are the job descriptions or presumed relationships between the people recorded. We do not believe it necessary to straight-jacket programs in ways that hamper their effectiveness. At the same time it is our experience that more problems arise from misunderstanding as to what one's responsibilities and authorities are than from formal limitations based on written job descriptions. We therefore recommend that projects delineate their organizational structure and the roles of each of the persons and of the expected manner of interaction. Such a written document then provides the project evaluator with a means of assessing whether these specified roles and role relationships are being fulfilled and whether the deviations from these expectations are causing problems within the total system or whether the roles need modification. Feedback from such an assessment would allow for the modification of either a role, or its relationship with another role, or for the certification that the structure as designed was functioning adequately. These recorded role expectations could then be discussed by the staff so that mutual understanding is maximized.

The administrative aspects of the implementation evaluation have more to do with operating procedures than with organizational structure. Administratively, one is concerned with how efficiently decisions get made and activities get accomplished and whether the degree of efficiency is sufficient to accomplish the objectives on the stated time-line and is sufficient to maintain staff morale. For example, are persons on the newly created project being paid on schedule? Are materials being ordered and received according to the time-line? Are decision-making milestones being passed at the rate appropriate to the time-line? For example, are parent contacts made at the time stated in the grant? Is the testing of children for selection into the program being accomplished at the appropriate time? Are diagnostic follow-ups being accomplished when specified?

The implementation evaluation (consisting of the monitoring of the organizational and administrative aspects of the program) has not been particularly prominent in the minds of many of the consumers of evaluations, except when the system fails to function properly. Then, everyone wonders what is wrong, typically explaining the malfunction in terms of "bureaucracy," "red tape," "personality clashes," or in terms of the alleged incompetence of some project member(s) or person(s) with whom they must relate.

We can list the persons to whom an implementation evaluation might be relevant; these same persons will be found to be interested in the progress and outcome evaluations as well.

Funding agents. The concerns of funding agents with implementation evaluation are obvious, though, as noted above, seldom are their concerns expressed in grant or contract proposal guidelines. We believe it is the result of the youthfulness of administrative sciences and organizational psychology that evaluation guidelines do not contain detailed information regarding what we are here calling "implementation evaluation."

A funding agent wants to assure that the program functions smoothly in order that the efficacy of the substantive ideas under consideration can be fairly assessed. Their second interest in such evaluation involves what we consider to be the proper use of the term "accountability": Has the project organized and administered itself in a professional manner such that achievement of its objectives is at least feasible? If a project can be accountable, then the monies spent at the very least should net an understanding of whether the particular idea has viability.

It is, indeed, regrettable that administrative and organizational problems are presently seen as sources of embarrassment for programs and therefore are denied and/or carefully hidden from view. Relegated to the status of "gossip," these problems will never be further understood until we are willing to admit to the complexities and difficulties of administrative and organizational activities and seek solutions for these problems.

With the spirit of inquiry, you should apply the following list of questions to one's program as part of its implementation evaluation.

Organizational Questions.

a) What are the duties (job descriptions) of persons to be employed by the project?

b) What are the duties vis a vis the project of persons not employed by the project, e.g. administrative personnel who will implement the project in their local education agency?

c) What is the organizational structure embodying all of these persons, i.e., the lines of authority for carrying out the various major activities of the project?

d) More specifically, what are the relationships between these various roles described in the grant?

e. Have the decision-making procedures been specified? Are they clear and consistent?

Administrative Questions

a) For each major activity that the project must carry out, what are the administrative plans for accomplishing each activity? e.g. How will equipment be ordered? How will persons be paid? Will payment to project people follow local or state salary schedules?

b) Have materials been ordered in time to be available when they are required?

c) Are there adequate physical facilities for the program?

d) Have all staff positions been filled?

Many other questions must also be asked that relate to the specific characteristics of the project.

Other persons interested in the implementation evaluation. Whereas the implementation evaluation comprises a monitoring of whether or not each of the organizational and administrative activities is carried out as planned, the mere existence of the plan represents a shared set of expectations among project personnel and those with whom the project will interact. As such, administrators who must be involved with the program, from the funding agent to those carrying out the program, will find the written implementation evaluation objectives most useful. It will serve to clarify their role vis a vis the project and give them the shared expectations about each other's responsibilities.

This same situation holds for project staff members whose role and role relationships with other members of the staff, and with significant others outside of the staff, will be sufficiently well defined so that the formal aspects of their relationships with others will be mutually shared.

Staff members and administrators may find that upon initiating the project some of the roles and role relationships are not adequate to meet the objectives. Naturally, changes should then be made in the organizational structure and administrative procedures in order to maximize the objectives. The purpose of the initial drafting of the implementation measure is that it makes all concerned more aware of how things are organized and administered and, hence, more conscious of problems in this domain either before they occur or as they are occurring. In our experience it is more difficult to solve problems that derive from implicit assumptions about shared expectations which may, in fact, not be shared than it is to solve problems which have been labeled and recognized by the persons involved. Using our previous example, it is much simpler to negotiate the issue of whether or not the psychologist has the authority to enroll children he has tested in the remedial program if there are written guidelines which can be used as a touch-stone. Without written guidelines, some subset of his decisions may be accepted if they are consistent with those of his supervisor while others may be contradicted by this person when not acceptable. In such a situation, the domain of the psychologist's authority is never clarified and the possibility of an interpersonal problem arising between him and the supervisory person is likely.

Generally, most persons who are served by the grant, usually the children and their parents, are not particularly interested in program implementation unless the program is seriously malfunctioning. Consequently,

there is little initial input that one might expect from parents, teachers, school board members, or other community leaders regarding program implementation. It is only when serious problems occur that these people hear the "gossip," and then become concerned about this aspect of evaluation.

Progress Evaluation

Progress evaluation is essential to the project staff members who can use these data to alter their course for meeting the project objectives. However, the existence of such an evaluation is a comfort to administrators who can as a consequence know "how the program is going." Being primarily concerned with issues internal to the project, progress evaluation derives very little direct input from persons outside the project, except to the extent that these external persons' needs and interests are represented in the objectives toward which the progress evaluation is focused. For example, parents of handicapped youngsters may be particularly interested in an in-service program for teachers in their local school. A progress evaluation could be established which evaluates the success of each of the in-service program sessions, obtaining participant feedback on their value, on their format, and perhaps even on the degree to which new skills were acquired. While parents will certainly be interested in the outcomes of the sessions as a whole, they will likely not be interested in the analysis of each in-service session even though such data may make future sessions more effective in meeting the project's objectives.

Progress evaluation questions are of the following kind:

a) Are the substantive activities described in the program being carried out on the time-line established in the project? E.g., Has there been one in-service session for teachers each month as prescribed? E.g., Have the fifteen children been screened and assigned to the resource room within the time period as specified in the proposal?

b) For some activities slightly more complicated questions must be asked: Are the activities being carried out in the degree and kind prescribed in the contract? E.g. Are four individually tailored lessons being given each child each week in the resource room? Here, the degree (four sessions) and the kind of activity (individually prescribed instruction) must be assessed rather than simply the occurrence or non-occurrence of some behavior or event.

c) For each of the objectives, will the progress shown by the outcome evaluation be sufficient to accomplish the objective within the time frame established in the project proposal? E.g., Do project teachers' best judgments of their pupils' criterion referenced weekly testing indicate to them that the child is making progress or is some modification in the lesson planning going to be necessary for the child to achieve at the level stated in the project's objectives? E.g., After

assessing the present amount of interest shown by other districts in the program will the resources being expended and strategies being adopted be sufficient to encourage other districts to adopt the program during the next school year as called for in the objectives?

The kinds of information required to answer questions of this latter type are obviously highly specific to the project objectives. However, the general point is that information must be gathered and then judged as to whether or not the objectives will be met. The basic principle here is that information should be sought in order to assess progress rather than simply speculating or hoping that the objectives will be attained.

Outcome Evaluation

The outcome evaluation is the most complicated of the three types of evaluation in that it is of interest to so many different groups and agencies. Also, its complications derive from the fact that outcome evaluation is unique to each project, whereas implementation evaluation and some of the structural aspects of the progress evaluation are relatively consistent from one project to the next. The potential list of questions that could be asked as outcome objectives of a project is infinite; the task of the project initiator is to assess which have the highest priority, which might produce the most information for future decision-making, and which are within the budgetary limitations of the program.

When choosing outcome objectives, it is well to consider the domain of persons interested in the project's outcome and the kinds of questions these people will ask.

a) The present funding agent and other funding agencies concerned with similar programming will be particularly interested in whether or not the program demonstrates anything new or confirms something that was previously thought to be true.

b) Funding agents also must be recongized to be self-serving to some degree, in that their own credibility as a funding agent is dependent upon their success in choosing programs wisely. Hence, they need information to demonstrate their progress in accomplishing the goals for which their administrative unit was established. For example, an agency established to serve the needs of blind children would not long exist (hopefully) were none of its programs beneficial to the blind.

In our experience, funding agents typically are quite vague about their own outcome objectives. They give relatively little direction to project initiators so that initiators are frequently found to ask, "What do they want us to evaluate?" While it is judicious to be concerned with the interests of the funding agent because an evaluation pleasing to the funding agent might increase one's probability of obtaining further funding, such concerns are often overdone. Project initiators know more about their project than do the funding agents and are thus in a better position to determine the character of the outcome objectives. We are not suggesting that the project

initiators be blind to the interests of their funding agent. Quite the contrary, we are suggesting that they ask what they might be able to demonstrate that would show funding agents that their programs are worthy of support. The answer lies not with the funding agent but with a careful analysis of the project itself. This issue becomes clearer at local levels where the project initiator will have more interaction with those persons controlling resources. There the initiator has a much better opportunity to assess the interests of the potential funding agents and consequently can learn what evaluation information he would need in order to insure a program's continuance.

The following list of questions might be useful in ascertaining the domain of possible outcome objectives:

a) What motivated the program; that is, what needs promoted the establishment of the program?

b) What is the program attempting to accomplish? Are there some primary objectives and some secondary ones?

c) Who provided impetus to the project and what information would they want to see collected to maintain their interest and support?

d) What were the specific interest groups who had a role in stimulating this project and still have an interest in some particular aspect of the program? What information would they want to see derived from the project?

e) Remember your own needs as project initiator: As someone with latitude in selecting the focus of special programs, what would you like to see this program demonstrate?

f) Keeping in mind the range of potential consumers of the program, what kinds of evidence would each want from you to persuade them to adopt the program in their district? This same question asked of yourself is often a good starting point: "What would I ask of someone else were they trying to convince me of this program's merits?

In summary, outcome evaluation questions can be characterized most simply by the following single question: "Who wants to know what about the program and what information will they accept as evidence?

Selecting Evaluation Questions

From a host of possible questions, you must select those that will maximally serve your interests and those of potential project consumers. You must decide the amount of money to be devoted to the evaluation enterprise, how the money will be apportioned between the implementation, progress, and outcome evaluations, and specifically what the content of each of these three evaluation endeavors will be.

Preliminary Considerations

In preparing to choose evaluation questions, four rules of thumb are suggested: (1) obtain an evaluator's advice, (2) seek information from relevant sources, (3) involve project site personnel, and (4) be rational. These considerations will be discussed in turn.

Obtain an Evaluator's Advice

A number of different issues are involved in the selection of an evaluator. During this formative phase, you need not have determined how the project will conduct its evaluation. Consequently, the evaluator who assists in making the decisions regarding the evaluation content and methodology may not be the same person who eventually carries out these tasks. It is, in fact, likely that this evaluator will not be the one hired by the project because those evaluation persons available for consultation are typically not also available for the more detailed evaluation work on specific projects. Consultation is frequently obtained from someone employed by the same agency as the project initiator, someone usually associated with the division whose task it is to prepare grant requests. There are definite advantages in having the evaluator help in determining the evaluation's content and methodology and carry it out. It is also desirable to have the project director involved from the very beginning. The realities of grant preparation within public education make it unlikely that the project evaluator can be selected prior to funding.

Some Guidelines. In obtaining a consultant evaluator to advise in grant preparation, the following guidelines may be helpful:

a) Select an evaluator who may be available to be or to assist the project evaluator.

b) Select an evaluator who has had experience with similar programs.

c) Select an evaluator with whom you have had previous dealings or who comes highly recommended by someone you trust.

d) Select an evaluator who will listen to the specifics of the program rather than one who appears to know how to evaluate the project before its detail is even described to him. We caution

people to beware of purchasing "stock evaluations;" we highly recommend that prior to retaining an evaluator, you ask him to read over this manual and discuss his reaction to it with you. This discussion should allow you to determine whether or not you will have sufficient rapport for a good working relationship. Your goal is to find someone who will be sensitive to the implementation and progress stages of evaluation rather than someone who views evaluation solely as the application of an experimental design to a service program, that is, one who views evaluation as synonymous with what is here termed "outcome evaluation." There is no reason why an evaluator should not explain to you why his approach is superior to the one recommended here. You should be able to assess whether this person is capable of giving you the advice you need. If you cannot understand his arguments as to why one approach is superior to another, you should be confident enough to question whether it is truly your lack of knowledge that creates your misunderstanding or whether, perhaps, you are being "snowed." We firmly believe that evaluators, like any other project staff, should contribute to the total program with the same kinds of checks on their activities as are imposed on other project personnel. In dealing with an evaluator unknown to you, ask to see previous reports he has contributed to and note specifically the role he played. Examine these reports to see if they have the elements you desire.

e) The specific skills that the evaluator should have include knowledge of budgeting, specifically the cost of various tasks that would comprise an evaluation. He should know about administrative organization and job duties at least to the extent that he is willing to draft them into the implementation evaluation. He should have knowledge of experimental design, specifically with the application of experimental designs to similar kinds of service programs that you are constructing. He should have knowledge of various instruments potentially useful for answering some of the outcome evaluation questions. He should be capable of constructing individually tailored rating scales and checklists capable of assessing progress towards various objectives in the program. He should have experience in writing evaluation sections of proposals, particularly experience in drafting questions in behavioral terms so that they are amenable to objective assessment.

These criteria are extensive, to be sure, but it is best to know what services you are getting and how difficult the evaluation task can be rather than to assume that anyone can do it. For instance, you should not assume that any psychologist can adequately accomplish an evaluation. School psychologists are trained primarily in child assessment testing, not specifically in project evaluation. Many psychologists can be capable evaluators if they acquire the additional skills necessary. But you must not assume that they are capable of evaluation simply by virtue of their psychological background and training.

Evaluator's role. An associated issue concerns the specific relationship of the evaluator to the project. Although the evaluator who advises you in the formative phases may not be assigned to the project itself when funded, he can advise you on whom to select and what this person's relationship to the project should be.

There should be one person connected with the project who assumes primary responsibility for carrying out the evaluation. Typically, this person should be directly responsible to the project director.

Three general types of evaluation roles might be considered. In one, the evaluator is a project staff member, usually having other duties along with his evaluation responsibilities. Here, the evaluator is intimately familiar with the project. If handled with tact and maturity, this relationship can result in a superb evaluation, particularly in the implementation and progress aspects. Having a project member be the evaluator can also serve the function of defusing the evaluation by assuring the fellow staff that it is a project assessment by the staff and not an evaluation of the individual staff members. A person integrated with the staff - working with them - can develop the rapport necessary to utilize scientific methodology to answer priority questions in as sensitive a manner as possible.

The problem here is that projects can seldom afford a staff member solely for evaluation, thus evaluators having other relevant skills need to be found. Frequently, personnel selection operates in the reverse manner: the persons having specific administrative and substantive functions are first selected and then it is determined whether any of these persons would be capable of doing the evaluation. Typically, none of the persons are sufficiently capable but failure to budget for an evaluation person often results in the project director and the psychologist sharing this responsibility, though neither is actually capable of the task.

A second step of evaluation role is sometimes referred to as a "third party" or "external" evaluation. In this arrangement, the project subcontracts the evaluation to some outside person or agency. The major advantage with this type of evaluation is its objectivity, but it can suffer from this very virtue by being insensitive to the details of actual project functioning. The strength of the third party evaluation is primarily in the outcome phase, although third party evaluators with sufficient budget knowledge and with prior experience with the project's content can certainly produce exemplary implementation and progress evaluation. However, they must spend considerable time interacting with the staff in an ongoing fashion in order to construct sensitive implementation and progress evaluations and to monitor adequately the information derived from these evaluation steps.

The third type of evaluation has elements of both of the first two, being an evaluation designed by someone outside the project who nevertheless has considerable knowledge about the project. Typically, this type of relationship is afforded by an evaluator provided by a state or county education agency. Such a person might be paid part-time by the project or have his

services donated by the parent agency. He may bring to the project a wide range of experience evaluating projects of similar content. Under this type of arrangement, the evaluator typically uses the services of other personnel in data gathering, and, at times, in scoring. The major problem with this method is that the evaluator may be cast in the role of the intrusive outsider or emmisary of project staff superiors. By making the role of the evaluator as clear as possible, these problems can be minimized.

Choosing between these three types of evaluation models may depend heavily upon available funds and upon the allocation of these funds to the various aspects of evaluation: implementation, progress, and outcome. Smaller projects will likely have to accept whatever evaluation services are available from the parent agency or utilize whatever expertise is possessed by the staff. With more sizable funding, the decision revolves around the distribution of resources to implementation and progress evaluation rather than to outcome evaluation. If the project is in its early stages of development (the first year or two), we suggest that you stress careful monitoring of project procedures (implementation) and the degree to which the project is progressing toward its objectives (progress evaluation). In this case, an ongoing relationship with project staff is mandatory, dictating that the evaluator either be a part-time staff member or in some other way possess a working relationship with the staff. If, on the other hand, the project is more mature and the evaluation issues surround only its ability to meet its objectives, a carefully instrumented and designed outcome evaluation would be stressed. In such cases an external evaluator is suitable, although even in this case the external evaluator must spend considerable time learning about the details of the project objectives and procedures. so that the instrumentation chosen to evaluate the objectives is maximally sensitive to tne project's impact.

Obtain Information from Relevant Sources

The second preliminary step in selecting evaluation questions is to obtain as much information as possible from the sources interested in the project, e.g., the funding agent, other administrative personnel, potential staff members, potential project site personnel, interested professional groups, and others. By thinking ahead and asking yourself who will be interested in this project once it is funded and ongoing, you can determine whether or not you wish to include these persons or at least seek their opinions during these formative planning stages. A rule of thumb here is that if you desire or require the support of a person or agency once the program is funded and under way, you would do well to involve them in the initial decision making. Even if you already know that these persons' ideas may not be entirely consonant with your own, it is important to recognize that if these persons have the potential to disrupt the project's functioning, they are much more likely to do so if they have been excluded from the project's formulation than if they have been included (even if their ideas are not heavily represented in the final project).

We are restating our position that the interest of various groups, including the funding agent, be specifically addressed when selecting the evaluation questions. Rather than be obsessive about what the funding agents

want, it is well to ask. Rather than wondering whether this program will meet the demands being made by a parent group, ask them. Very possibly the program will not suit their demands; however, with some modification unimportant to you the project might be changed in a manner so as to gain their support.

Though we recognize that projects are often hastily organized in order to meet submission deadlines, the involvement of significant others in the early stages represents more than good public relations: it can be both a way of enriching the concepts and methods involved in the project and also a means of obtaining important support which will enhance the project's ability to fulfill its objectives.

We believe that, whenever possible, it is better to plan to avoid problems by involving significant others who have the potential to create difficulties for the program. Any administrator knows that problems can never be totally undone. For example, there are almost always lasting effects that result from interpersonnel difficulties. Just list for yourself those persons who would wish to be involved in program planning who would feel slighted if not involved and you will recognize immediately that this list of persons represents a serious threat to project success. You owe it to yourself and to your project staff to avoid the potentially negative impact of these persons or agencies.

Involve Project Site Personnel

A third issue concerns what other persons should be involved in selecting the evaluation issues. Some compromise is obviously necessary: involving all potentially interested persons totally is unmanageable administratively, so frequently a procedure is necessary to obtain some lesser level of input such that the needs of many parties are met and their possibly valuable input is received. However, certain key persons need to be considered when selecting the specific evaluation issues. In addition to your evaluation consultant, persons at the potential site should be involved at this time. We have previously discussed some of the reasons for their inclusion: the necessity of the site being receptive to the program; their willingness to accept the additional administrative demands the project imposed; their administrative willingness and capability of collecting the evaluation data necessary to satisfy the evaluation requirements of the funding agent and the interests of the implementor and significant others; and then general support of the program, preferably with a commitment to the program and a sense of ownership derived from being involved in the planning stages.

The local administrative head. There is no substitute for the knowledge of the specific persons at the potential project site gained from your personal interaction with them. With such knowledge, you can determine how much involvement these persons desire. Some local administrators prefer only to be kept informed so that they can adequately field questions coming from their staff or from parents. Other administrators require a more substantive commitment to any program operating within their jurisdiction. These styles typically reflect one's total management approach; the administrator who believes the support of his total staff is necessary for the success of special programs

will require much more involvement both for himself and his staff than will the administrator who exercises more centralized decision making.

Your knowledge of the line of authority in the local site that you have selected will tell you which persons need to be involved. There is clearly a single person at the site, its head administrative officer, who obviously must be notified and invited to participate.

We advise that you describe to this head administrative officer that the evaluation task involves selecting those aspects of the program which will be subject to analysis. He should be told that he might consider involving all personnel who have line authority over persons operating within the special project. It is important that they have smooth working relationships in order to implement the project's evaluation. Usually, these persons occupy such roles as testing coordinators or heads of special services, persons who might feel displaced or threatened by the new program.

Other Administrators. In addition, it is important to be sure that you have not overlooked persons in positions of line authority intermediate to you and the head administrative officer at the site. For example, if you are employed at the state level and plan to place a small resource room project in a suburban school, it is important that the district level administrative officers are aware of this intention, supportive of it, and have had the opportunity to become involved if they wish. Though this is a rather obvious example, the picture becomes more complex when placing programs in large cities where an additional city level of school administration exists. The compromise, of course, always lies between the problems of involving too many persons so that decision making proceeds inefficiently versus dealing with the future problems that omitting significant others can create. As you certainly realize, education administrators are heavily overcommitted and do not necessarily seek to become involved in every special program in their purview. Offering a person a chance not to become involved may serve your purposes just as well as offering them involvement. You, of course, have to be prepared to accept their involvement, but often you can get persons to "sign off" a project so that you have "touched all the appropriate bases" without necessarily increasing the difficulty of getting your job done. All we are suggesting is that in the early formative phases, the same administrative attention be afforded that you would normally give to program administration itself, because we believe that the formative phases are critically important for establishing either a supportive or non-nutrient environment for the new project. Programs which develop out of shared needs, and are organized with the input of tacit approval of persons throughout the relevant administrative structures, have a much greater chance of survival than do projects lacking this careful preparation.

Substantive personnel. The personnel at the potential project site are important to the decision making in a number of areas. However, we are primarily focusing here on the conduct of evaluation. Their presence specifically in this regard is to assure that they understand that this special project carries with it not only extra services but also extra administrative demands and extra demands upon some of their regular personnel. Frequently, education

projects are not sufficiently funded to permit the employment of highly trained and experienced evaluators. Consequently, data collection and sometimes even its analysis must fall to on-site professionals whose primary duties and competencies lie in other areas, such as teaching or psychometrics. The local administrative officer and his testing and evaluation staff need to be informed about the additional duties they will undertake so that as initiator you will know whether the chosen site is, in fact, a fertile ground for the project. It is better to find out during these planning phases that your chosen site is not receptive to the additional demands that are necessary for program monitoring, even though it might otherwise be an acceptable site. It is obviously a very easy matter either to select an alternative site at this time or even to negotiate with the initially chosen district what other compensation they might receive for these additional duties than to solve the problems attendant on a misunderstanding later on.

Who controls the evaluation? A related caution is offered; because the issue of evaluation is so emotionally loaded, it is important that you as project initiator be extremely clear with on-site officials as to who will control evaluation decision-making. They need to know how the evaluator will be related to the project administratively: is he to be under their control or will he remain under your control? By local sites taking on a project, they are obviously placing themselves in a position where their own competencies will be tested either implicitly or explicitly. Knowing who controls the information flowing from the evaluator is a very critical issue for them. Do you, in fact, plan to retain authority over the evaluation or will you turn it over to the local site as soon as a mutually satisfactory plan has been drafted? Whatever your decision, it is mandatory, we believe, that these expectations be made explicit and shared by you and the project site head administrative officer and his key staff members.

Be Rational

One final preliminary step in selecting evaluation questions is the development of a proper attitude. Be rational; recognize those aspects of the evaluation issue selection that you can control and those which you cannot. We shall discuss immediately below what kind of considerations you might wish to take into account. You should recognize that you, more than any other person, have control over the evaluation procedure because you are designing it. You should also recognize that you may not have total control and that you may need to give up some of your control to the site or to other administrative officers. Furthermore, in recognition of the fact that the project you are initiating does have a prehistory, you need also accept that you do not have a "free hand" in choosing the evaluation questions. Experienced administrators recognize that life is never so simple as this and so the selection of evaluation issues is just another example of how administrators must deal with multiple contingencies. All we are stressing in this final point regarding selection of the evaluation issues is that you deal with this topic with the same degree of rationality and reasoned judgement as with any other administrative decision.

Settling on an Evaluation Strategy

The first step in selecting evaluation issues is to plan the scope of the evaluation. Do you wish to include an implementation, progress, and outcome evaluation?

Apportioning Resources Within Evaluation

Some considerations are the following:

a) If the project is a multiple year program, you might postpone outcome evaluation until the second or third years.

b) If the project outcomes are necessary for continued support for a second year, obviously you must produce results very quickly; you will need a talented evaluator sensitive to the project's nuances to be able to show positive value of a program in a short time.

c) Is your site amenable to the scrutiny necessary for an implementation evaluation? If not, you might consider eliminating this aspect of evaluation, but we recommend that if the site is not open to such scrutiny, it might not be an adequate site for your project. Competent administrators have run programs for many years without formal, written implementation evaluations. Our guess, however, is that it would not be these administrators who would be adverse to such scrutiny so long as the monitoring were not disruptive or inordinately expensive. Rather, it is those who tend to sweep problems under the rug and hope that they will go away who are most likely to reject the monitoring. In our minds, the institution of a special program is sufficiently difficult to require all of the positive features it can garner. Strong, confident administrators are as critical to program success as are the staff members concerned with its substantive activities. Consequently, we caution project implementors to select their sites very carefully and to insist on some level of implementation evaluation. This degree of implementation evaluation should satisfy the implementor that he can assess whether a project is adequately operating.

d) A progress evaluation is mandatory. Even an evaluation limited to the routine recording by the project director of the program's accomplishments as it works toward its objectives is superior to the unchecked flow of activity. A project director's subjective judgements recorded in writing may be a very adequate source of information. Its writing allows other persons to assess the validity of these perceptions from their own perspective. We think that it is a serious mistake to allow new programs to operate for a lengthy period without formal, written assessment on their progress. Again, this attitude springs not from any concern about the integrity of the professionals involved in the programs, but from knowing about the value of defining and dealing with problems through self-conscious evaluation.

Noting the Evaluation's Audience

Who is interested? A list should be made of all persons or agencies with whom the evaluation report will be shared. This list likely includes the funding agency, the person to whom you as project initiator are responsible, the persons throughout the administrative system funding the project and those receiving it, and so forth. Others may include oneself, other project staff, teachers and perhaps even pupils and parents involved in the project, funding agents from whom additional future support might be sought (such as state legislatures and local school boards), and school administrators responsible for program planning.

The purpose of making this list of persons and agencies who may be interested in the project's evaluation is simply to assure that the evaluation will satisfactorily answer the questions such a varied audience might pose. This exercise makes one cognizant of the multiple interests served by an evaluation and, thought you might not be able to pose and answer all the questions of this heterogeneous audience, you can select for evaluation those issues considered most important.

What would they want to know? For each of the persons or agencies listed in the preceding step, you should describe each of the questions you would expect them to pose of the project. Consider their implication questions, their progress questions, and their outcome questions. This may seem like a big job and it is! It is from this total domain of possible questions that you will select the evaluation questions for the project. It would clearly be too extravagant to plan an evaluation for all of these questions from every source, so use your evaluation consultant to give estimates of the difficulty and expense of evaluation each question.

Responding to Immediate Pressures

Immediate pressures also need to be considered in selecting the questions.

a) Is there any one or any group concerned about the administration and organization of programs similar to the one you are initiating? If so, are you put under pressure to select evaluation issues pertinent to their interests? This event is unlikely in our experience--even the most severe organizational and administrative problems do not appear to be sources of upset, perhaps because such problems are so typical. Also as noted above, such problems are often relegated to catch-phrase explanations such as "that's the way bureaucracy is" or alternatively are explained in terms of a personality clash between two persons. In either case the problems are not dealt with adequately. Therefore, you will likely not feel any immediate pressure to produce an implementation evaluation though we believe you should accomplish one to assure the program's adequate functioning.

b) Is there a certain aspect of the proposed program which stems from widely felt needs or from the interests of a specific group? For example, a local parent group may have promoted a project to utilize parent aides in the school and, hence the aide's impact would

be a central issue for progress and outcome evaluation.

c) Are you under pressure to show specific changes in the target population within a given period of time? If such is the case, considerable resources need to be devoted to isolating potential areas of change and measuring them sensitively.

d) Alternatively, you might be under immediate time pressure to produce an interim report within a few months of the project initiation. In which case, your evaluator should concentrate heavily on the implementation and progress aspects of evaluation in order that data can be produced at an earlier date than would be possible with an outcome evaluation.

Responding to Priorities

Priorities are frequently established by immediate pressures on the one hand and concerns about longer range planning and one's own interests on the other hand.

a) Is the program related to a general state or local government plan for educational services in such a way that certain specific aspects of the program need to be evaluated according to the priorities of this broader plan?

b) Does your position as program initiator give you long range planning capabilities and, hence, do you have specific interests in the kind of information to be derived from this program? If so, you should be sure that your own interests are represented in the evaluation.

c) Remember that program longevity is an important issue to keep in mind during evaluation planning; how will you support this program or its staff after the program period has elapsed? This is the issue discussed earlier concerning who will possibly adopt the program and the evidence of the program's value they will require.

Considering the Costs

Pressures and priorities must be measured against the cost of answering certain kinds of questions. Monitoring systems capable of exemplary implementation evaluations are very cheap. Outcome evaluation, which frequently requires multiple testing of children both in the special project and in control groups, is considerably more expensive. You will have to depend on your evaluator to estimate costs, based on his best judgement of how each of the questions you have isolated might reasonably be answered. However, for purposes of discussion let us look at a few examples of evaluation questions and what kind of costs might be involved in each.

Evaluation costs, of course, are intimately linked to the methodology used to answer the questions posed. The fact is that answering questions is fraught with uncertainty and is expensive. Furthermore, there is no

guarantee that the expenditure of money will result in unequivocal answers to even the most central questions. After all, if knowledge were cheap, we already would have purchased answers to all our questions.

From this stage of selecting evaluation questions to drafting the evaluation procedures in writing, you will become increasingly dependent on the skills of the evaluator. While doing an exemplary evaluation is certainly a difficult task requiring technical competence as well as creativity on the part of the evaluator, it is not a task that needs to be shrouded in mystery. Therefore, there is no reason why the evaluator should not be able to explain to you the basis for his chosen procedures and the reasons that some alternative methods (which you might have suggested) were not deemed adequate. Again, we caution that there is no reason why the evaluator should not be able to communicate his rationale.

If you do not understand the evaluator do not simply assume it is your fault. There is no reason why the rationale cannot be adequately explained, even if you are unfamiliar with the technical aspects of the methods. We are not just concerned about protecting project initiators from unscrupulous evaluators; more importantly, you should be able to understand the logic behind the evaluation because it is frequently the administrator who must "sell" the project to others. He, therefore, needs to understand what the evaluation information is saying and why it is evidence for or against certain assertions. The next section of the manual describes some of the more technical aspects of evaluation planning but in a manner that we think will be understandable to the interested administrator. Specifically, it provides a brief overview of evaluation designs so that you can have meaningful input into both the selection of evaluation questions and the answering methodology. In the subsequent section, we describe how the evaluation should be drafted, utilizing behavioral terminology so that the evaluation issues can be handled in an objective, scientific fashion. These two sections should provide you sufficient familiarity with some of the evaluator's tools so that you can assist in the decision making.

Evaluation Designs

This section of the paper explains in some detail the nature of thirteen evaluation designs, their good and bad points, their inherent costs, and some examples. Actually, the first several designs are implementation and progress evaluation designs, while the remaining ones are primarily used for outcome evaluations. At their best, designs B, C, D, E can produce a mass of data and can certainly offer more implementation and progress information than Type A, and can facilitate a preliminary (and a very necessary) look at program effectiveness. One cannot, however, reach any valid outcome conclusions without more powerful evaluation designs (e.g., Types F through M).

Simple Designs

Type A: NO EVALUATION Carried Out on the Activity

Omitting an evaluation is often an oversight - but more frequently, because the project director is not required to evaluate for renewed funding, s/he ignores this task. In other instances, no money was budgeted for evaluation. When an activity is not formally evaluated, there is no way to determine its effectiveness although project staff and other project observers usually utilize their own subjective impressions (Type D design) to evaluate program success. This type of design involves no budgeted costs to the project. However, it can become costly in that the program funds may be being wasted on unverified procedures which may cause the program problems in the future, perhaps even its survival.

Type B: A LOG of What Happened

A non-evaluation design, the log is an enumeration of events that occurred in the life of the program (e.g., the number of children screened, the number of teachers attending in-service sessions). As such, it simply records the day-to-day activities of the program, and not necessarily any of its effects; that is, it can only show that the program was implemented. However, in some instances, as for example when the log shows an increasing number of teachers consulting with a specialist, or a decrease in the number of referrals, program effects can be inferred. When making such inferences, one must bear in mind that such numerical changes do not imply benefit, and furthermore that they may be produced by numerous other plausible causes.

The costs of maintaining a log of events include secretarial time for record keeping and a system for keeping track of program happenings. In a teacher in-service program, a log might include counting the number of participants per session, the amount of money spent for workshop consultants, and the money spent for release time for the participating teachers. Whereas, for a program concerned with identifying children with learning problems, the log would include the number of pupils screened, diagnosed, and placed in remedial programs, the number and kind of test materials used, the number of hours spent testing, etc. In the situation where a resource room program is set up, logs could be kept on the number of children seen each day, types of materials they used, and the number of children returned to their regular classrooms at the end of the semester.

Type C: Frequent MONITORING of the Activity

In a true time-series design, there is a series of measurements at periodic intervals before, during, and after a given program. This procedure allows the program director to be better able to pinpoint at what point in time (and under what circumstances) changes occurred. Such methods are extremely beneficial in progress evaluation where program modification for program improvement is the purpose. Basically, this procedure involves more frequent logging of events and would involve the additional costs necessary for gathering data more often.

With respect to a teacher in-service program, monitoring would involve counting the number of participants in previous in-service programs and in subsequent programs, as a basis for comparison; one might also secure information on participant's reactions to previous in-service workshops, the present one, and subsequent ones in an effort to compare this program with others.

For an identification program, one could determine the number of pupils screened and diagnosed previous to the present program versus during its operation. A similar procedure could be applied to the test materials used.

Type D: SUBJECTIVE Impressions

Everybody alive has biases, conscious and unconscious. Impressions of a given activity can never be totally objective. They are always affected by one's feelings and relationship to the activity. Project staff members have a large stake in the success of their project (i.e., continued employment, increased salaries, increased local and regional exposure, more status and prestige, etc.) Consequently, a subjective evaluation of one's own program must be accepted cautiously and points to the need for evaluation designs such as Types G-M.

For progress evaluation, it is both acceptable and desirable to secure testimonials and other impressions. These will probably provide some tentative information about where a program is succeeding and failing. But these then need to be verified using objective measurement and experimentally stronger designs (see more complex designs--below).

The evaluation of any part of one's program is typically colored by subjective impressions. For example, if teachers seem to be enjoying the workshop programs, one tends to assume they are benefiting from it. Because children are diagnosed as learning disabled and then assigned to a remedial program, one has a tendency to believe they are being helped. It is assumed that pupils attending a resource room five times per week will receive more help than those children with similar problems who stay in the regular classroom.

The cost of such subjective impressions is nil;their value is almost as little in the determination of definite program effects. Adequate evaluation is going to be costly, as will be apparent in the subsequent designs.

TYPE E: POST-activity Measures on a TREATED Group

A minimum of useful scientific information requires at least one formal comparison. With a Type E design, the post-activity measure results cannot be compared to anything. In this case, we are not able to determine 1) if the participants are better off than before the activity, or 2) if they would have arrived at this point without benefit of the activity. On the basis of a post-test alone, anything said about the effect of the treatment activity runs the double risk of being both worthless and misleading.

As an example, achievement post-scores on children in a resource room setting could be collected or the total number of hours spent by all children during the year could be calculated for the resource room. These will give you numbers with quantitative values, but they will be virtually useless because you cannot tell if these numbers are relatively "good" or "bad," "high" or "low."

The costs of evaluation increase when pupil testing comes into play. Administration, scoring and score analysis of the tests is time consuming and will cost money in salaries, data analysis, and report writing time. In the case of this evaluation design, the above costs will be unwisely spent because so little information is obtained for the money.

Type F: PRE- and POST-activity Measures on a TREATED Group

A before and after measurement on one or more variables can show whether and how much the treated group changed during the intervening period. But with this design we are still unable to say that the treatment caused the change as many other simultaneous events might be responsible. Unfortunately, this design is commonly employed. It can be useful as a preliminary determination of program effectiveness but is not definitive.

This commonly employed design typically involves test administration before and after some event, such as a teacher in-service program or a year-long remedial program. It is expected to show that the participants increased their skills in some ability area. Such a change may be found but it is wrong to conclude that the program caused this change, or that this change could be caused only by this program.

Doubled administration of tests and data collection procedures are required with attendant increases in cost. This design will give you more information than Type E but still will not be conclusive.

Type G: PRE-, DURING, and POST-activity Measures on a TREATED Group

Cautions similar to those for the Type F design are advised in this case, although one can plot the progress of the group during treatment using this design. Noting the course of change can be extremely helpful as a progress evaluation, especially in locating specific effective efforts within one's program. Several intermediate measures will allow you to determine more precisely how the group changed during treatment and what might have caused these changes.

More Complex Designs

In the following situations where two or more groups are being compared, it becomes important to utilize randomization. The TREATED and CONTROL (and later COMPARISON) groups need to begin "equal" on each measurable comparison for meaningful interpretation. For example, if some antecedent event were to effect scores, then both the treated and control group scores would be equally affected; the same holds true for the other plausible causes for score change. When there exists a comparison group, the effect of an activity can be seen in one's treated group relative to the comparison group as the scores of both groups, other things equal, will both be affected the same by regression and other effects. So, if the groups differ on the post-test, it is likely due to the treatment.

Type H: PRE- and POST-activity Measures on TREATED and CONTROL Groups

In this case, the treatment is compared to the mere passage of time. Theoretically, the control group is not receiving any treatment, but in actual practice, this is rarely the case. Typically, the control group is receiving the regular educational program. If this regular educational program is a viable alternative to the experimental treatment under study, it is probably best to label it a COMPARISON group, since it will be retained if it proves as or more effective than the experimental treatment program. This evaluation design, when randomization is utilized, is very powerful in determining whether or not the treatment is better than the control program. Without randomization, any post-test differences between groups could be caused by inherent differences in the groups' composition.

Type I: PRE-, DURING, and POST-activity Measures on TREATED and CONTROL Group

The advantages of intermediate measures during a program are discussed under the Type G design. Cautions as listed for the Type H design are also applicable in this case.

Type J: PRE- and POST-activity Measures on TREATED and COMPARISON Groups

Comparison groups are treatment conditions alternative to the experimental treatment (e.g., resource rooms versus self-contained classrooms for the moderately learning disabled). Having a randomly assigned comparison group allows you to compare the effects of the experimental treatment with the effects of an alternative activity. Of course, unless subjects are randomly assigned to the groups, differential effects obtained may be due to pre-existing differences between groups. The pretest data can alert you of initial differences but you are then faced with serious statistical and interpretive problems.

A question that is left unanswered in this design is whether the mere passage of time could have produced similar changes in both groups of subjects. Designs of Type L and M provide controls to allow this possibility to be evaluated.

Type K: PRE-,DURING, and POST-activity Measures on TREATED and COMPARISON Groups

See the cautions listed under the Type J design and the positive features noted under design Type G.

Type L: PRE- and POST-activity Measures on TREATED, CONTROL and COMPARISON Groups

Assuming randomization, the Type L design will allow determination of whether the experimental activity is better than no activity at all (mere passage of time) and whether it is better than some alternative treatment. However, it is still necessary to consider carefully the possibility of reactive effects of pretesting and possible differences of instrumentation. It would be desirable to have an additional unpretested control or comparison group to measure the reactive effects of the pretest. One should also make sure that no change in measuring or scoring procedures could have added to or caused any observed differential effect of treatment. This design is obviously strong. Given randomization, it provides many opportunities to study change.

Type M: PRE, DURING, POST-activity Measures on TREATED, CONTROL and COMPARISON Groups

This design provides additional information to that available in Type L. Cautions are suggested under Type L while the advantage of intermediate testing is discussed under Type G.

Drafting a Written Evaluation Plan

At this point, the funding request is ready to be drafted. The project initiator has roughed out the general procedures of the project (often referred to as the model), consulted with his colleagues at the potential project site, involved someone trained in evaluation, listed all those persons and agencies that are interested in the project and noted the type of questions each would hope the project would answer. He should then consider the evaluation design and the type of data necessary to answer these questions and, with the help of the evaluator, estimate the cost involved. He then selects those issues for evaluation which are most germane to the project, which serve the immediate pressures wherever possible, and yet which are consistent with long range priorities, particularly those that enhance the survival value of the project and which are economically feasible. The evaluation costs are entered into the budget. With these preparatory steps completed, drafting the evaluation is a simple matter. However, a few comments about writing the evaluation might be helpful.

Goals versus Objectives

It is frequently useful to distinguish between the broad goals of a project and its more targeted objectives. The distinction is more one of degree than of kind; goals are generally considered to be long range, idealized outcomes which give direction to one's project. The following are examples of goals: to train classroom teachers throughout the state to be able to educate the learning disabled child; to prevent learning disabilities through preschool intervention; to provide appropriate special services to all of the state's learning disabled youngsters. Objectives, on the other hand, are more immediate targets to be achieved during the course of the project. Present practice dictates that these objectives be worded in behavioral terms in order to facilitate the evaluation of whether or not the objectives were met. Up until this point we have considered "evaluation issues" and "evaluation questions" without even introducing the term objectives. We should examine now how the notion of a behavioral objective relates to what we have been calling questions.

Questions versus Objectives

The difference between questions asked about the project and behavioral objectives is basically one of wording. As project initiator, for example, one may ask whether the itinerant teacher model will be able to provide enough support to the regular classroom teacher to enable a learning disabled child to gain one month in his reading skills each month that he participates in the project. This question can be stated as an objective simply through rewording: "To provide prescriptive teaching in reading to each learning disabled child in the project for at least four thirty-minute sessions per week in order to produce at least one month gain on a standard reading test for each month that the child is enrolled in the project." It really does not matter whether the project initiator translates the questions into affirmatively stated objectives or whether he leaves them as questions. There is value in stating questions as objectives in that they become

more action-oriented than skeptical. Also, stating questions as objectives provides the opportunity to translate often subjectively and grossly expressed ideas into clear, objective, behavioral terms. The important point is not whether the outcome to be assessed are stated as questions or as objectives but whether they are expressed clearly in behavioral terms so that empirical data can be the arbiter.

Behavioral Terms

Objective, behavioral terms help reduce the ambiguity in determing if the objective was met. For example, "To help each learning disabled child in the project achieve success in reading" is not clearly nor entirely behaviorally stated; the criterion for "success" is not specified nor is the nature of the "help." At the project's end, there could be disagreement as to whether the child were "helped" or even if helped whether he achieved "success." A more adequate behavioral statement of this objective was provided above; "To provide prescriptive teaching in reading to each learning disabled child in the project for at least four thirty-minute sessions per week in order to produce at least one month gain on a standard reading test for each month that the child is enrolled in the project." This statement does not change any of the project's procedures; it only clarifies what is to be done, what is the expected result from the intervention, and how the effects will be measured and assessed. One can objectively assess (given that data are collected) whether each child did indeed receive the four weekly sessions and whether his gains were as expected. In short, an objective is well-stated if it specifies the conditions (behaviors) necessary to assess empirically the degree to which the objective was achieved.

Drafting the Evaluation Section of a Funding Request

When preparing a written evaluation plan for submission as part of a funding request, note the following suggestions. Goals should be described in the introductory sections of the request. Objectives should be stated in the evaluation section. We suggest that a separate portion of the evaluation section of the proposal be devoted to the three aspects of evaluation: implementation, progress, and outcome. For each objective, the evaluation activities that would be engaged in would be stated immediately following each objective. For completeness, one should include in the activities the statistical treatment of the data to be used, if any. The following would be a skeltal example of the appearance of such an evaluation section.

Sample program. A series of teacher inservice programs; four two-hour sessions, one each Wednesday afternoon during the month of September; to inform teachers about the district's learning disabilities services, the referral procedure, characteristics of learning disabled children, and an introduction to methods for identifying and remediating these children; session leaders will consist of district learning disability specialists.

Implementation. Program Objectives: all district teachers in grades K-4 are notified of the series and provided financial incentives to attend; district L.D. specialists will prepare objectives for the series and individual sessions; facilities are scheduled and materials are secured.

Evaluation Activities:

1. Ask sample of teachers whether or not they have been notified of inservice sessions;

2. Ask district financial officer whether or not financial incentives are being offered;

3. Obtain copies of objectives and determine adequacy;

4. Determine if all materials are available when required during the sessions.

Progress. Program Objectives: participating teachers will attend all four sessions; objectives for the sessions will be obtained; participant feedback will be used to help determine the structure and content of subsequent sessions.

Evaluation Activities:

1. Keep records of attendance;

2. Attend sessions to determine if "script" has been followed;

3. Develop feedback mechanism (discussion or written questionnaire) and assess its impact on subsequent sessions.

Outcome. Program Objectives: participants will be able to list the L.D. services available and relate how to refer children for these services; they will know the characteristics of L.D. children and utilize this knowledge for referral purposes; they will be able to describe the methods for formally identifying and remediating L.D. children.

Evaluation Activities:

1. Develop a written instrument measuring the degree of knowledge the participants have concerning district services, L.D. characteristics, screening and diagnostic methods and remedial instruction;

2. Administer this instrument immediately following the last in-service session and one month later and analyze the results;

3. For an eight week period (four weeks during and four weeks following the inservice sessions) count the number of children referred for possible L.D. and count the number finally diagnosed as L.D. by the specialist;

4. During the week after the last session, ask participating teachers to describe the referral procedure. Also ask this of non-participating teachers.

Transferring Responsibility to the Project Director

Frequently, project initiators and other proposal writers do not remain involved in the day to day functioning of the project. More typically, a project director is hired to direct the day to day functioning. The project director then works within the administrative structure at the project site, typically with the district level coordinating the fiscal administration of the project, and then with school level handling the administration of the substantive activities. Sometimes the project director is drawn from the staff at the project site though, in our experience, it is more typical that the project director and a sizable portion of the special project staff represent additional employees at the site rather than reassigned employees.

Transmitting the Evaluation Plan

The problem then arises of transmitting the evaluation plan to the project director. Additionally, one must assure that the project director obtains suitable evaluation assistance to carry out the plan laid down by you and your evaluation consultant. If significant members from the project site have been involved in the evaluation planning as has been recommended, some of the difficulties will already have been avoided. Nevertheless, the task of acquainting the project director and the on-site evaluator with the planning remains.

We recommend that a copy of this manual be read by the project director and the project evaluator with you as initiator noting those sections that you thought particularly germane to your planning. By using the manual as a communication device, red pencilling those areas that you would like the project director to note, you can communicate your own attitudes about evaluation to the project director in a rather efficient manner. In so doing, you will also be establishing a basis of communication between yourself and the project director so that the expectations regarding the evaluation procedures can more readily be shared.

Additionally, we recommend that this manual be examined by the on-site evaluator so that the orientation used in constructing the program's evaluation can be transmitted to him without excessive amounts of time spent in meetings with the director and evaluator.

Selecting an On-site Evaluator

A carefully organized evaluation plan may often permit a less well trained person in evaluation areas to carry out an evaluation which otherwise would have been beyond his level of competence. This is to say that if appropriate preplanning as described in this manual has occurred and a careful written statement of the evaluation plan were accomplished, then in many cases the project psychologist or the project director may be able to carry out the evaluation with a minimum of extra assistance. The need for a professional, highly trained evaluator will be decreased significantly when the following conditions hold true:

a) In general, if the evaluation description is highly detailed, it can be carried out like any other set of activities by a component project director or his/her designate.

b) If the focus is on outcome evaluation and the assessment instruments were specifically designated in the proposal along with the design to be employed, then carrying out the evaluation is primarily an administrative procedure. Such issues as the manner in which the data should be organized and analyzed might require consultation from a research psychologist or an evaluation person employed by a parent agency--but the general plan will already have been laid down.

c) If the focus is on an implementation evaluation and the specific aspects of the administrative and organizational characteristics to be evaluated are detailed in writing, the monitoring of the administrative and organizational activities becomes purely an administrative matter. (Progress evaluation is the most highly individualized of the three aspects of evaluation and, as such, requires someone competent and confident in the evaluation area.)

Evaluation is not difficult so much as it requires a particular sensitivity to the ongoing aspects of the program and an appreciation for the need to utilize objective information in answering questions. A person with confidence, basic training, and a commitment to this type of problem solving can typically accomplish this task. At present, we plan to construct a manual geared specifically to progress evaluation for use by a project director so that the on-going functions can be monitored without incurring the heavy expenses of evaluation consultants. However, lacking specific directions, project directors should not be delegated evaluation responsibilities unless evaluation consultation funds are provided or, of course, unless he or she has expertise in this area.

Summary

Had you, as project initiator, followed our comments and suggestions to this point, you would have spent considerable effort and time developing an evaluation plan for your program. During this preparation phase you would have:

a) consulted with state, district and local educational administrators about their expectations for the program;

b) discussed with the local project personnel their concerns about the evaluation;

c) considered the demands for success by other interested parties, such as the funding agency, the public, and so forth;

d) with your evaluation consultant, prioritized these success expectations, made them into specific program objectives, and decided upon evaluation procedures for each objective;

e) made sure that the evaluation covered the area of implementation, progress, and outcome; and finally

f) transmitted this evaluation plan to the actual project director and the person on-site responsible for carrying out the evaluation.

Your responsibility relative to the evaluation is not yet completed. You must now be willing to receive the evaluation results as feedback for possible modification of the program model. Because you have been so personally involved in developing the model, reports of program problems may be discouraging. However, it is the feedback and subsequent program modification that makes evaluation so worthwhile. By listening carefully and learning from the broad range of data a well-conceived evaluation provides, one can surely increase the potential success of future programs, both through the gradual process of refinement and the more creative process of new program development.